

REMARKS

Informal Interview

Applicant thanks the Examiner for a courteous and useful discussion of the status of the claims. Examiner expressed recognition that the structure of the present invention is different from the structure disclosed in the Tsukamoto reference. Applicant understood Examiner's comments to further express an appreciation that the differences were patentable. Examiner and Applicant's undersigned counsel disagreed on whether or not the present structural recitations of claims 1 through 4 and 7 through 10 adequately expressed those distinctions. Examiner and Applicant's undersigned counsel also further discussed the meaning of the claimed structural recitation "extent" in terms of § 112.

Claim Objections:

The antecedent basis for "the edge" in line 10 of claim 1 is "an edge" recited in line 8. The "s" is removed by amendment. The amendment to claim 11 cures the other objection.

35 U.S.C. § 112

Recitation of the word "extent", claimed in the phrase "extent in a direction of illumination" is thoroughly supported throughout the text and drawings. The chips have a spatial dimension that extends in a direction parallel to the direction of light being emitted by them. It is shown in the drawings and supported by the original claims. The word "extent" is more than sufficient to particularly point out and distinctly claim the Applicant's invention. Accordingly, applicant understands that it is not the use of the

word “extent” but rather how it is applied in the present context that forms the basis of the § 112 rejection. Applicant points out that the word extent is expressly used in paragraph 18 of the original specification wherein the edge walls 7 are described in Figures 2 and 3.

The present amendments resolve the rejection of lines 9 and 10 in claim 11.

“How an edge has two portions” is clearly spelled out in the text, e.g., at paragraph 23, and illustrated in the drawings, e.g., Figures 3 and 4a. With this support the recited structure particularly points out and distinctly claims the invention.

35 U.S.C. § 102/103

Independent claims 1, 11, 15 and new claim 16 are not anticipated or rendered obvious by the Tsukamoto reference for the simple reason that the reference fails to disclose, teach, suggest or motivate the manipulation of a pre-determined luminous gradient in a light distribution by the spacing of an edge as claimed. The figures relied upon in the office action are ambiguous at best with regard to the spaced relation of any edge to any light source, and the text is silent on the subject. The same is true for the recitation of claim 11, as amended herein, to include the limitation “wherein said edge limits light distribution to be contained within the region of said edge,” the limitation of claim 15 that the edge “limits the light distribution to a luminous gradient in association with the edge portions” and the limitation in claim 16 wherein a shape of “the edge wall and/or edge is such that a pre-determined luminous distribution is produced”.

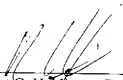
More to the point, the Tsukamoto reference, in the only two portions that address the issue in any sense at all, expressly teaches the opposite of the structural recitation of

the dependent claims. In Figure 4, the light distribution is clearly controlled by the refraction of the optical elements 11, 12 and 13, and are not controlled through any spaced relation of any edge, any extent of an edge or any other component that is not a lens. In the text, the portion of the reference relied upon in the office action as anticipating or teaching an edge as claimed, “accommodating portion 31A” is described in paragraph 52 as not interacting with the light source: “Light source accommodating portion 31A does not particularly have an internal surface provided for example with a reflector.”

In the Response to Arguments section, the Office Action takes the position that the claim recitation “the edge being in spatial arrangement to the luminous element chips such that a predetermined luminous gradient in a light distribution of the headlamp is formed in the region of the edges” reads on the Tsukamoto reference but the language on page 9 of the Office Action that the “edges limit the light distribution to be contained within the regions of the edges” does not. Applicant respectfully traverses because there is no difference in the distinction drawn between these two phrases. The spaced relationship between the structurally recited edge and the perimeter and extent (distance) of the chip defines a luminous gradient in the region of the edge, and this preconfigured definition of the luminous gradient is patentably distinct over the prior art of record. On one side of the luminous gradient there are light beams from the LEDs, and on the other side of the gradient there are not. Hence the luminous gradient limits the projected light. Accordingly, the phrases are synonymous and amending the claims to recite the synonymous phrase does not narrow.

However, claims 11 and 15 have been amended to include the language suggested in the Office Action in order to thoroughly recite patentably distinct structure.

Respectfully submitted,



By: Robert C. Haldiman, Reg. No. 45,437
Husch & Eppenger, LLC
190 Carondelet Plaza
St. Louis, MO 63105
314-480-1641
314-480-1505 FAX